Sample from 2011 Proposal Submissions:

THERAPEUTIC HYPOTHERMIA POST-CARDIAC ARREST: A REVIEW OF THE PHYSIOLOGY, EVIDENCE, AND A PRACTICAL APPROACH TO IMPLEMENTATION

Clinical/Scientific Importance & References

1. Statement of Clinical/Scientific Importance

Despite two landmark studies in the NEJM (1,2)in 2002 reporting the substantial benefit to cooling following out-of-hospital arrest followed by recommendations by the International Liaison Committee on Resuscitation (ILCOR; 3) to treat comatose survivors following arrest with this therapy, surveys suggest that most ICU services have failed to treat their patients with this life-saving therapy.

Of 2,248 mostly US (91%) of physicians who responded to a web-based survey (4), 74% said they had never used hypothermia following cardiac arrest. The leading two barriers to implementation included lack of knowledge and technically too challenging to implement. In order to narrow this gap, this program will improve knowledge by reviewing the evidence and physiology of therapeutic hypothermia, improve competence by outlining specific steps to develop and implement a protocol, and performance by working in small groups to assist participants with the beginning steps of their own protocol development so that they will implement this treatment for their patients and improve their mortality and neurologic outcomes. Given the intricate nature of thistherapy and the significant side effects, a thorough review of the treatment modality and how it impacts protocol development is crucial. We will provide this in this course.

2. Please cite 2 or 3 resources or references (in standard citation format) that could be reviewed by the Program Committee as evidence of need, if requested.

Evidence of Knowledge Gap and Practice Gaps:

1. Merchant RM, Soar J, Skrifvars MB, et al. Therapeutic hypothermia utilization among physicians after resuscitation from cardiac arrest. Crit Care Med. 2006; Jul;34(7):1935.

2. Abella BA et al. Therapeutic Hypothermia is underused after resuscitation from cardiac arrest: a current practice survey. Resuscitation. 2005;64:181-186

3. Wolfrum S, Radke PW, Pischon T, et al. Mild therapeutic hypothermia after cardiac arrest. A nationwide survey on the implementation of the ILCOR guidelines in German intensive care units. Resuscitation. 2007;72, 207.

4. Laver SR, Padkin A, Atalla A, et al. Therapeutic hypothermia after cardiac arrest: a survey of practice in intensive care units in the United Kingdom. Anaesthesia. 2006; Sep;61(9):873.